CLAIMS

What is claimed:

1. A method for measuring an animate body temperature, comprising:

emitting an interrogation signal from a first antenna interconnected to a hand held probe having a portable power source;

receiving a portion of said interrogation signal at a second antenna interconnected to a sensor device, wherein said interrogation signal is received via an air interface;

utilizing energy derived from said interrogation signal to measure a temperature of an animate body and transmit a signal indicative of said measured temperature back to said hand-held probe via said air interface; and

providing a user output indicating said temperature at said hand held probe.

2. The method of Claim 1, wherein emitting said interrogation signal comprises emitting an energizing field from said hand held probe.

3. The method of Claim 2, wherein said energizing field comprises one of:

a magnetic field; and

an electromagnetic field.

4. The method of Claim 3, wherein emitting an electromagnetic field comprises emitting a radio frequency (RF) signal.

5. The method of Claim 1, wherein, said step of receiving further comprises:

converting said portion of said interrogation signal into a drive signal.

6. The method of Claim 5, wherein said step of utilizing comprise applying said drive signal to a temperature measurement device to obtain said temperature.

7. The method as recited in Claim 1, further comprising:

second receiving said signal indicative of said measured temperature at said hand held probe via said air interface.

8. A method as recited in Claim 7, wherein said first antenna and said second antenna are only operative to complete said receiving, utilizing and second receiving steps when located within a predetermined range of each other.

9. A method as recited in Claim 8, wherein said predetermined range is less than about 4 feet.

10. A method as recited in Claim 9, wherein said predetermined range is less than about 1.5 feet.

11. A method as recited in Claim 1, wherein said providing step comprises:

supplying at least one of a visual user output and an auditory user output indicating said measured temperature.

12. A method as recited in Claim 1, wherein said utilizing step is automatically completed in response to said receiving step.

13. A method as recited in Claim 1, wherein said receiving and utilizing steps are completed substantially simultaneously with said emitting step.

14. A method as recited in Claim 1, wherein said emitting step comprises:

selectively activating said first antenna to emit said interrogation signal.

15. A method as recited in Claim 1, further comprising:

interconnecting said sensor device to an animate body.

16. A method as recited in Claim 15, wherein said interconnecting step comprises:

adhering said sensor device to a dermal surface of said animate body.

17. A method as recited in Claim 16, wherein said adhering step comprises:

removing a protective layer from an adhesive surface on said sensor device; and,

contacting said dermal surface with said adhesive surface.

18. A method as recited in Claim 17, wherein said utilizing step includes:

employing a temperature measurement device to obtain said measured temperature, wherein said temperature measurement device is disposed within said sensor device.

19. A method as recited in Claim 18, further comprising:

removing said sensor device from said dermal surface after use; and,

disposing said sensor device after removal.

20. A system for measuring an animate body temperature over an air interface, comprising:

a portable hand-held probe for transmitting and receiving signals via an air interface, said probe including:

a first antenna;

a power source; and

a user output; and

a sensor, interconnectable to an animate body, for receiving a signal from said probe, measuring a temperature of said body, and transmitting a response signal indicative of said temperature to said probe via said air interface, said sensor including:

a second antenna for receiving and sending signals;

a conversion circuit for converting a received signal to a drive signal; and

a temperature measurement device operative to utilize said drive signal to obtain said temperature.

21. The system as recited in Claim 20 wherein said hand held probe is operative to transmit an energizing field from said first antenna.

22. The system as recited in Claim 21, wherein said energizing field comprises one of:

a magnetic field; and

an electric field.

23. The system as recited in Claim 22, wherein said electric field comprises a radio frequency (RF) signal having a frequency between about 100 KHz and about 2.5 GHz.

24. The system as recited in Claim 20, wherein said user output provides at least one of a visual output and an auditory output indicating said temperature.

25. The system as recited in Claim 21, wherein said first antenna comprises:

a transmitting antenna and a receiving antenna, wherein said transmitting and receiving antennas are separate elements.

26. The system as recited in Claim 20, wherein said hand-held probe further comprises:

a switch for selectively activating transmission of signals from said first antenna.

27. The system as recited in Claim 20, wherein said hand-held probe further comprises:

a memory for storing at least one said temperature.

28. The system as recited in Claim 27, wherein said memory is further operative to store information associated with said response signal indicative of said temperature.

29. The system as recited in Claim 28, further comprising:

a microprocessor for comparing said response signal with said information to identify said temperature.

30. The system as recited in Claim 27, further comprising:

a user input for inputting information for storage with said temperature.

31. The system as recited in Claim 27, further comprising:

a data output port for downloading data from said hand-held probe to a data storage system.

32. The system as recited in Claim 20, wherein said conversion circuit comprises:

a rectifying circuits for converting said received signal into a DC drive signal.

33. The system as recited in Claim 32, further comprising:

a storage means for storing said DC drive signal.

34. The system of Claim 20, wherein said temperature measurement device comprises:

a thermistor operative to produce an output indicative of said temperature upon application of said drive signal.

35. The system of Claim 20, wherein said sensor further comprises:

an oscillator operative to vary a load applied to said second antenna according to said output in order to generate said response signal.

36. The system of Claim 20, wherein said sensor further comprises:

a memory structure.

37. The system of Claim 36, wherein said memory structure includes factory set information.

38. The system of Claim 36, wherein said memory structure is read/write capable.

39. The system as recited in Claim 20, wherein said sensor further comprises:

a housing for housing said second antenna, said conversion circuit and said temperature measurement device.

40. The system as recited in Claim 39, wherein said housing further comprises:

a band sized for disposition around a patient extremity, said band being operative to hold said hosing against a dermal surface of an animate body.

41. The system as recited in Claim 39, further comprising:

an adhesive surface disposed on said housing for adhering said housing to a dermal surface of an animate body.

42. A system as recited in Claim 41, wherein said housing further comprises:

a protective, removable layer on said adhesive surface.

43. A system as recited in Claim 39, wherein said housing includes an insulative layer on a surface that does not contact said body.